[redacted]

UNCLASSIFIED

LOS ALAMOS SCIENTIFIC LABORATORY

of

THE UNIVERSITY OF CALIFORNIA

28 March 1951

LA 1228

This document consists of 40 pages

[redacted] 20

GAMMA RADIATION EXPOSURE AS A FUNCTION OF DISTANCE

OPERATION RANGER

Report written by:

Ellery Storm

[redacted]

UNCLASSIFIED

[redacted]

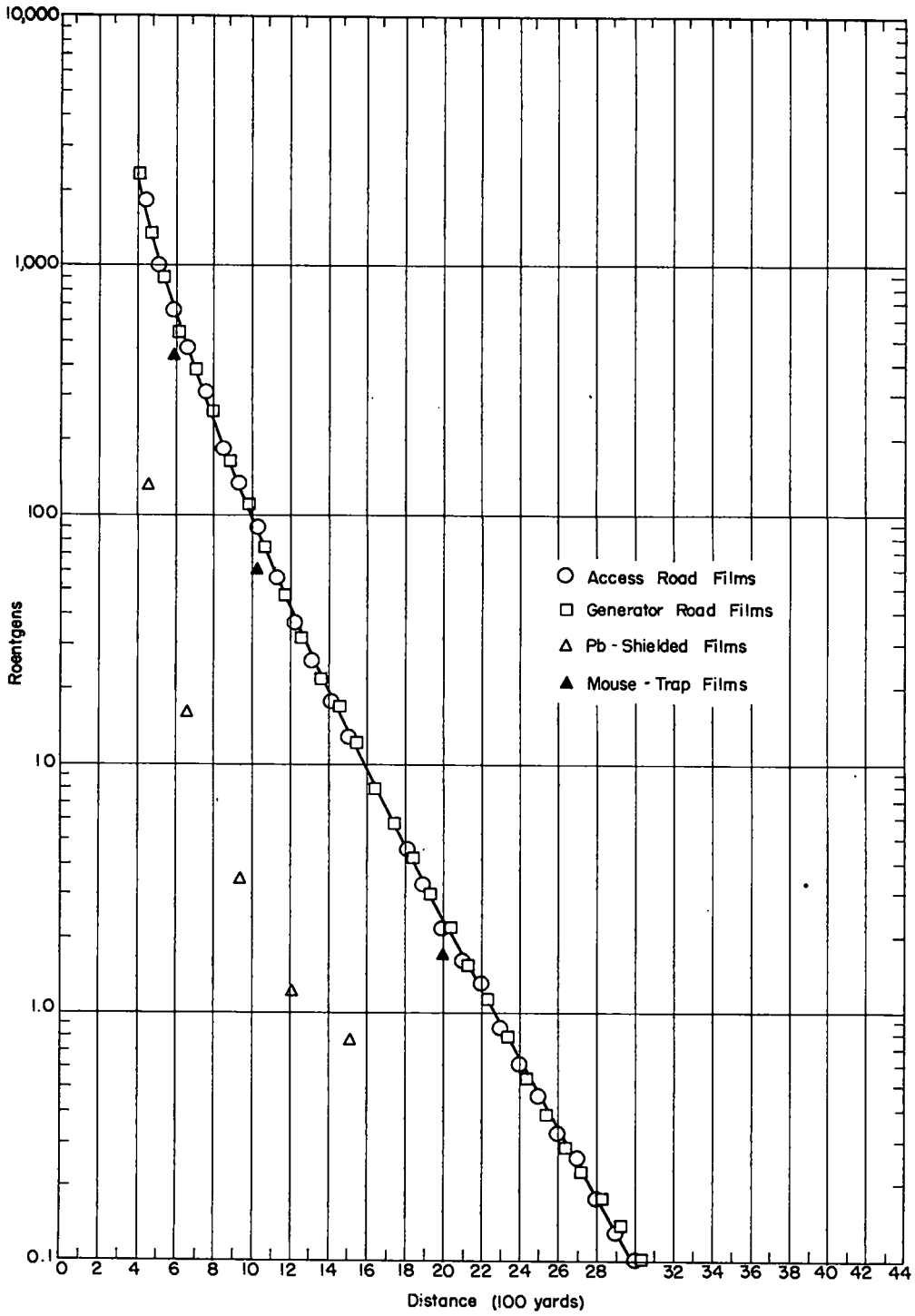

Figure 6
TEST A - Gamma Radiation Exposure vs. Distance

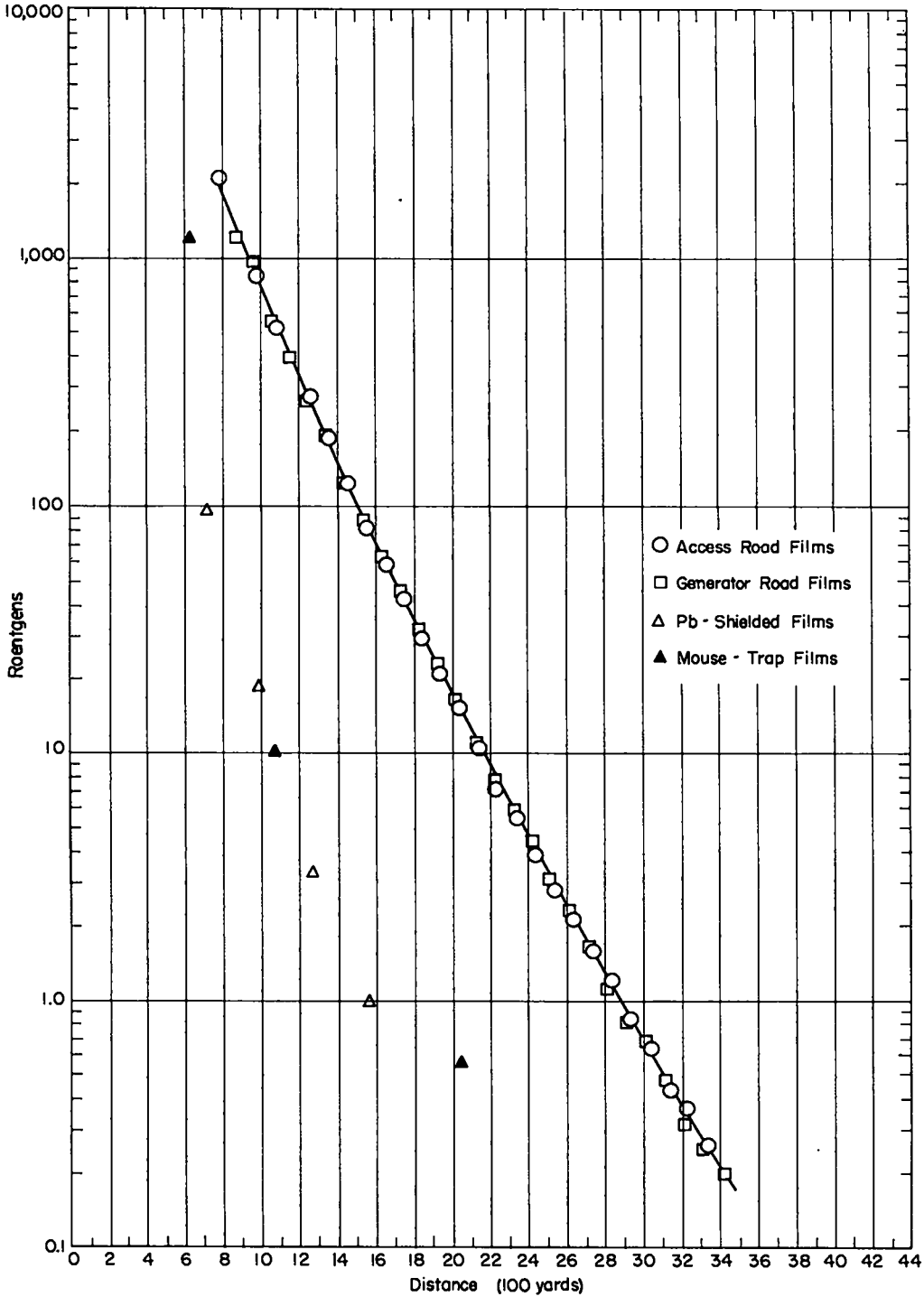

Figure 7
TEST B_1 - Gamma Radiation Exposure vs. Distance

[redacted]

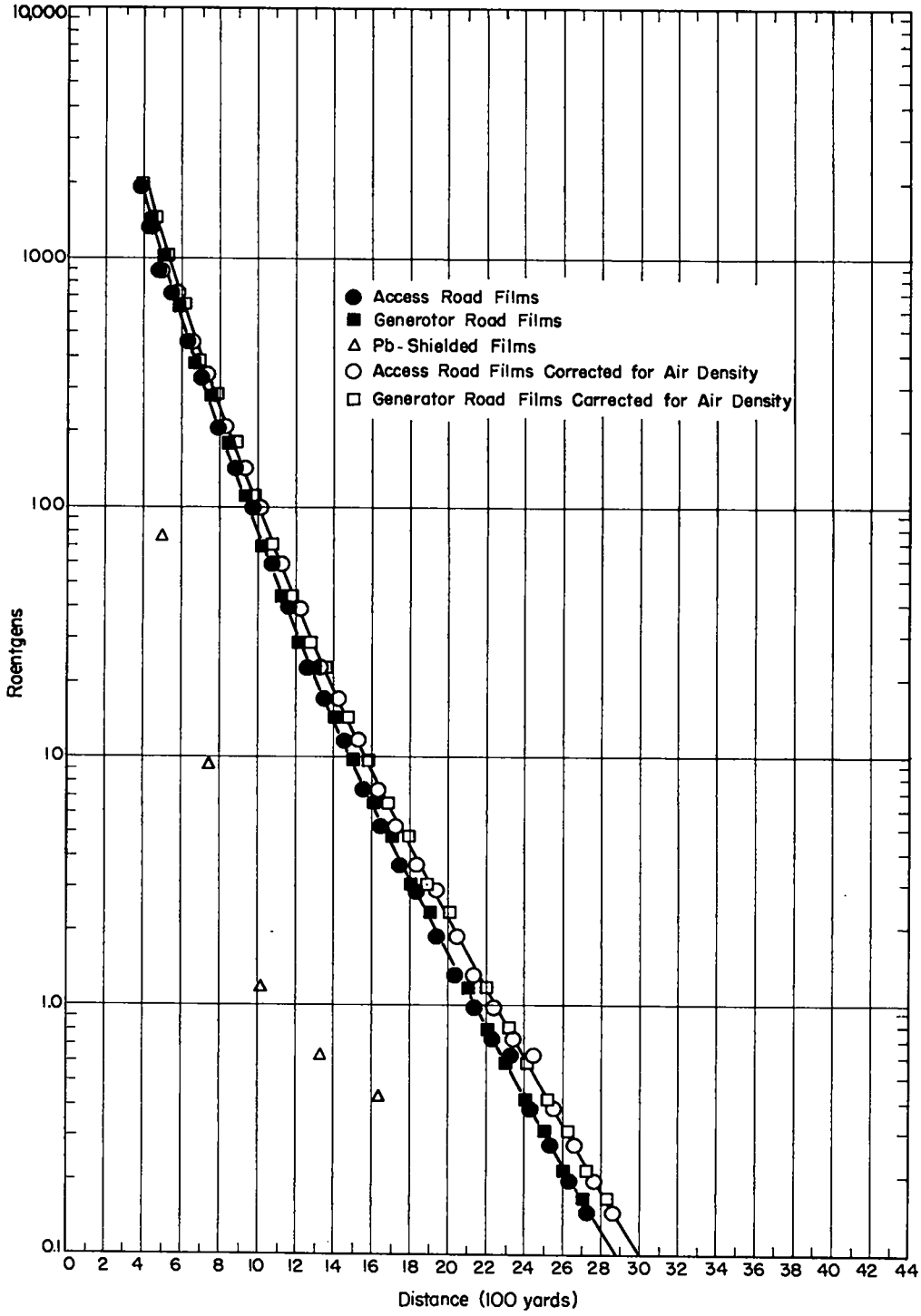

Figure 8
TEST E - Gamma Radiation Exposure vs. Distance

[redacted]

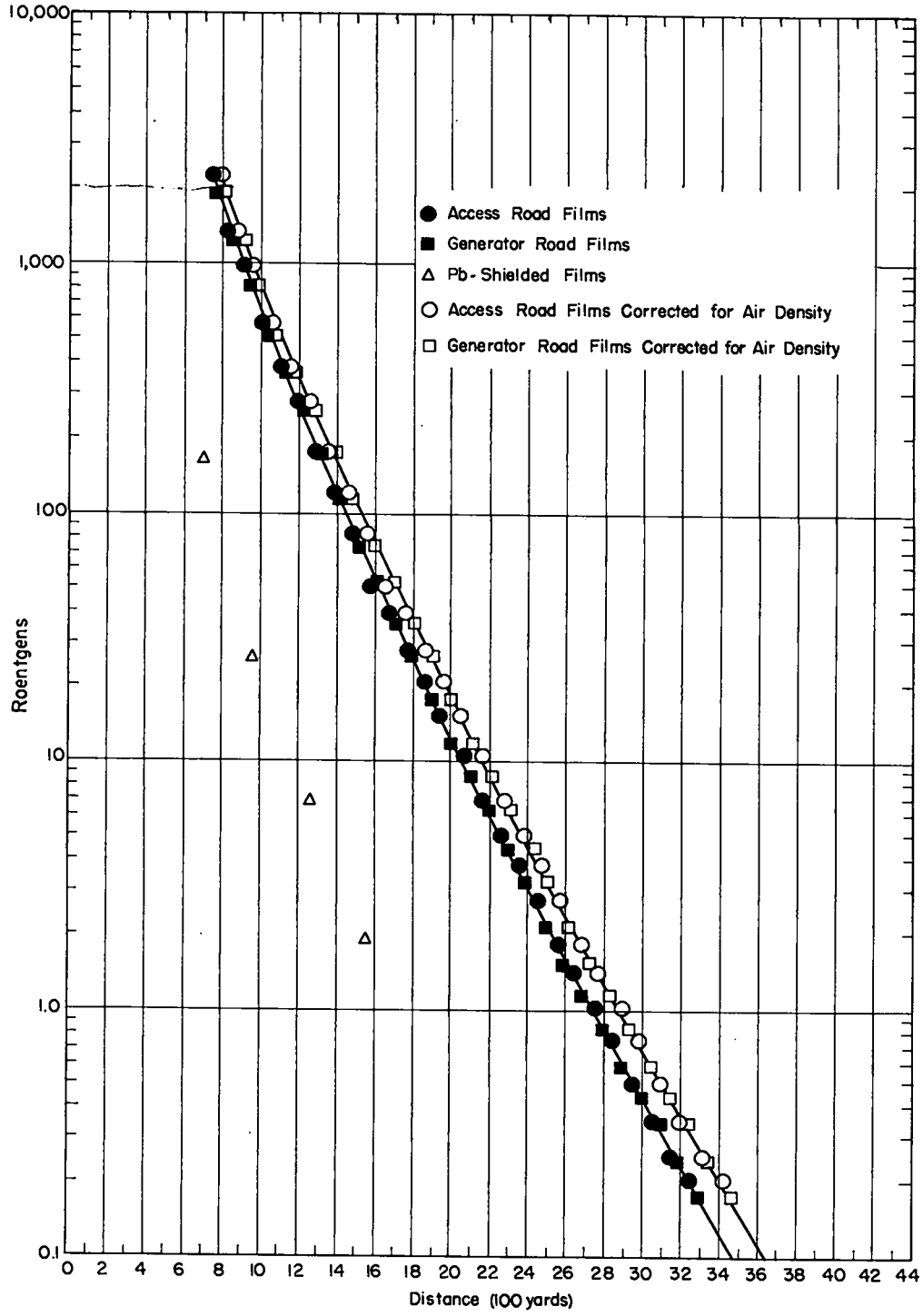

Figure 9
TEST B_2 - Gamma Radiation Exposure vs. Distance

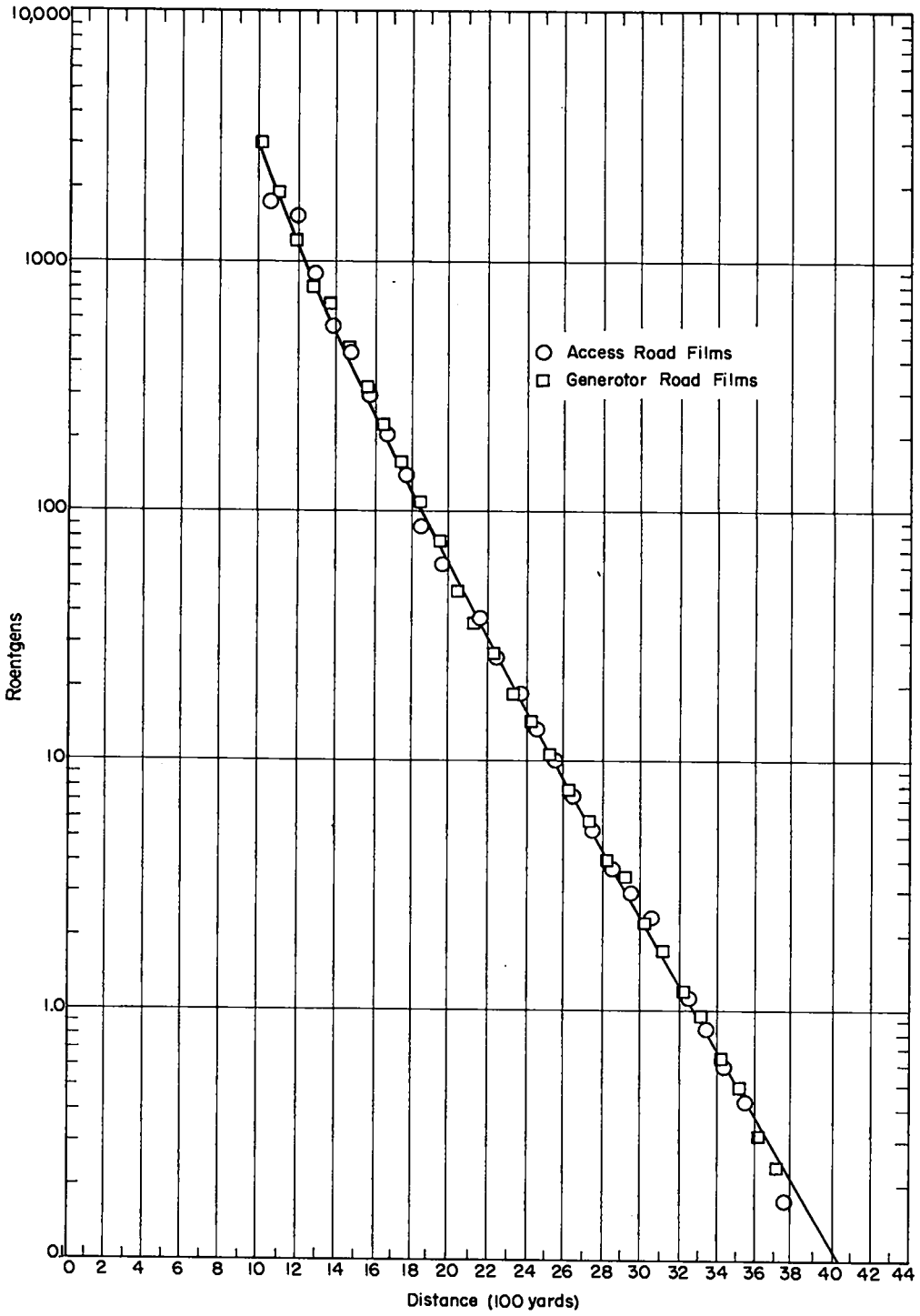

Figure 10

TEST F - Gamma Radiation Exposure vs. Distance

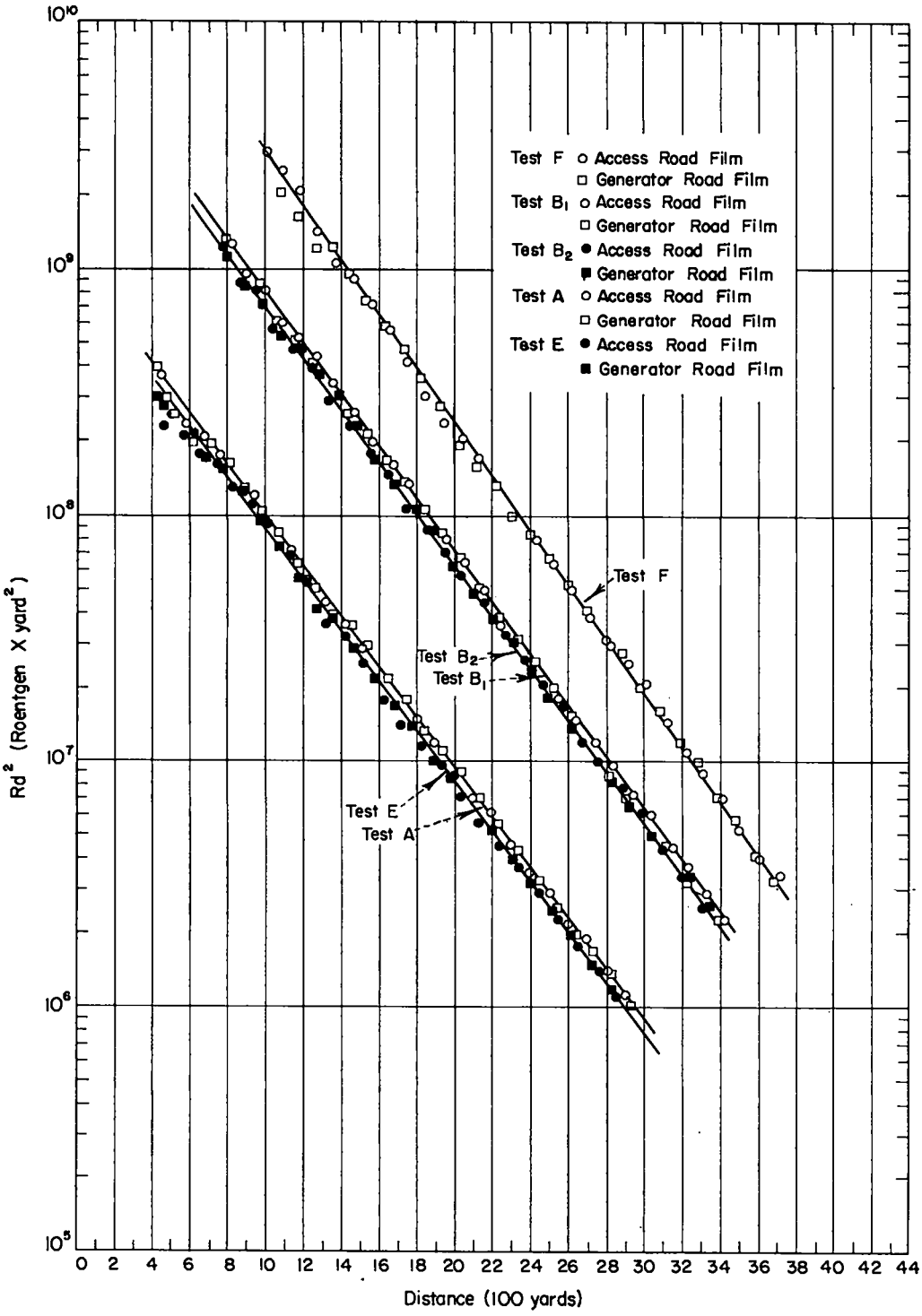

Figure 11
Gamma Radiation Times Distance Squared as a Function of Distance

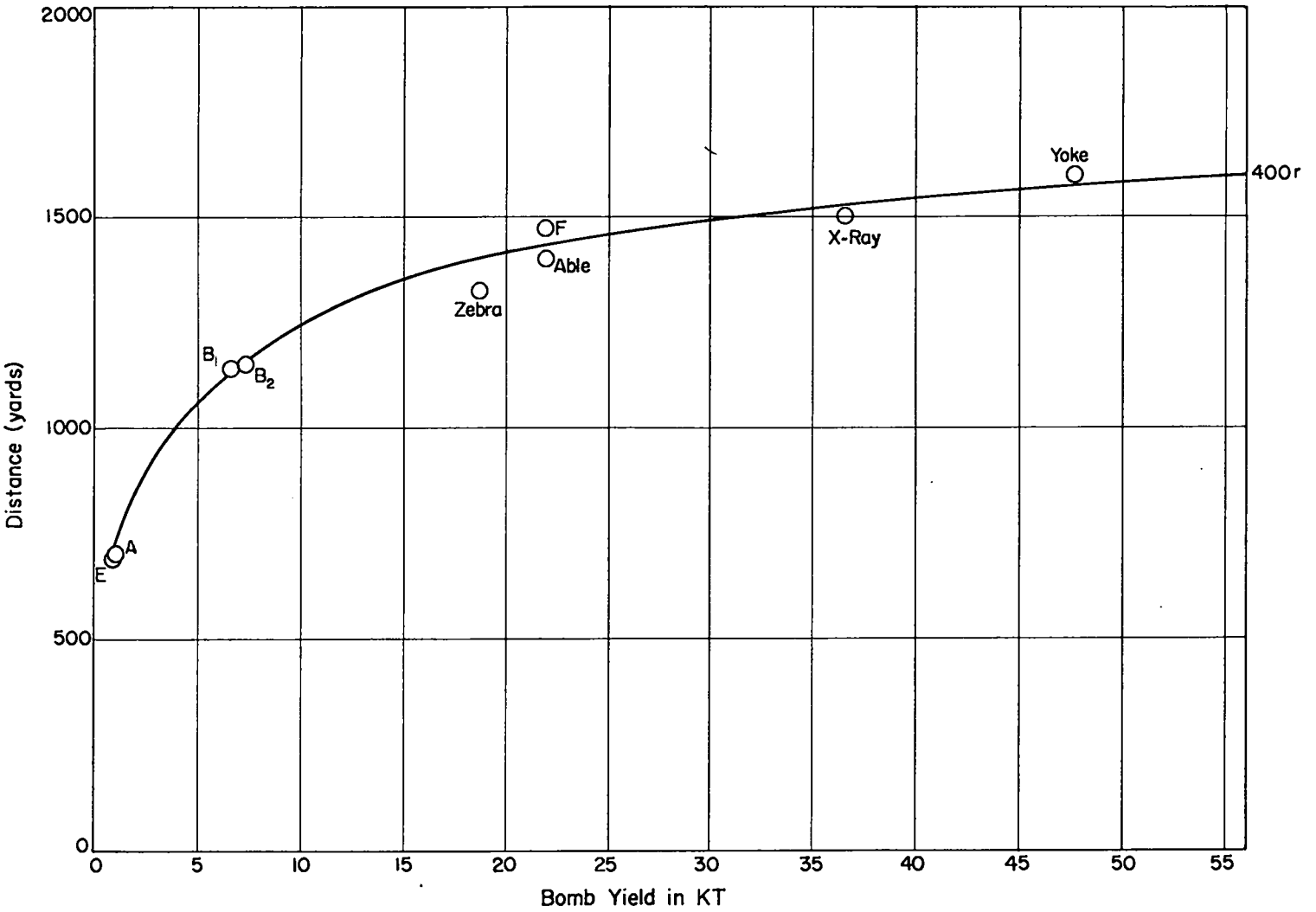

Figure 12

Distance of the 400r Level as a Function of Bomb Kilotonage

[redacted]

Table IX

Yield from

Gamma Radiation Exposure Versus Distance Measurements

All Tests Normalized to Fireball Measurement

of Test B_1 (7.4 KT)

Test	KT from Fireball Measurements	KT from Rd^2 Ratios at 3000 yards	Per Cent Difference
A	1.5	1.03	31.3
B_1	7.4	7.4	0.00
E	.94	.924	1.70
B_2	6.7	6.37	4.92
F	22	21.7	1.36

[redacted]

[redacted]

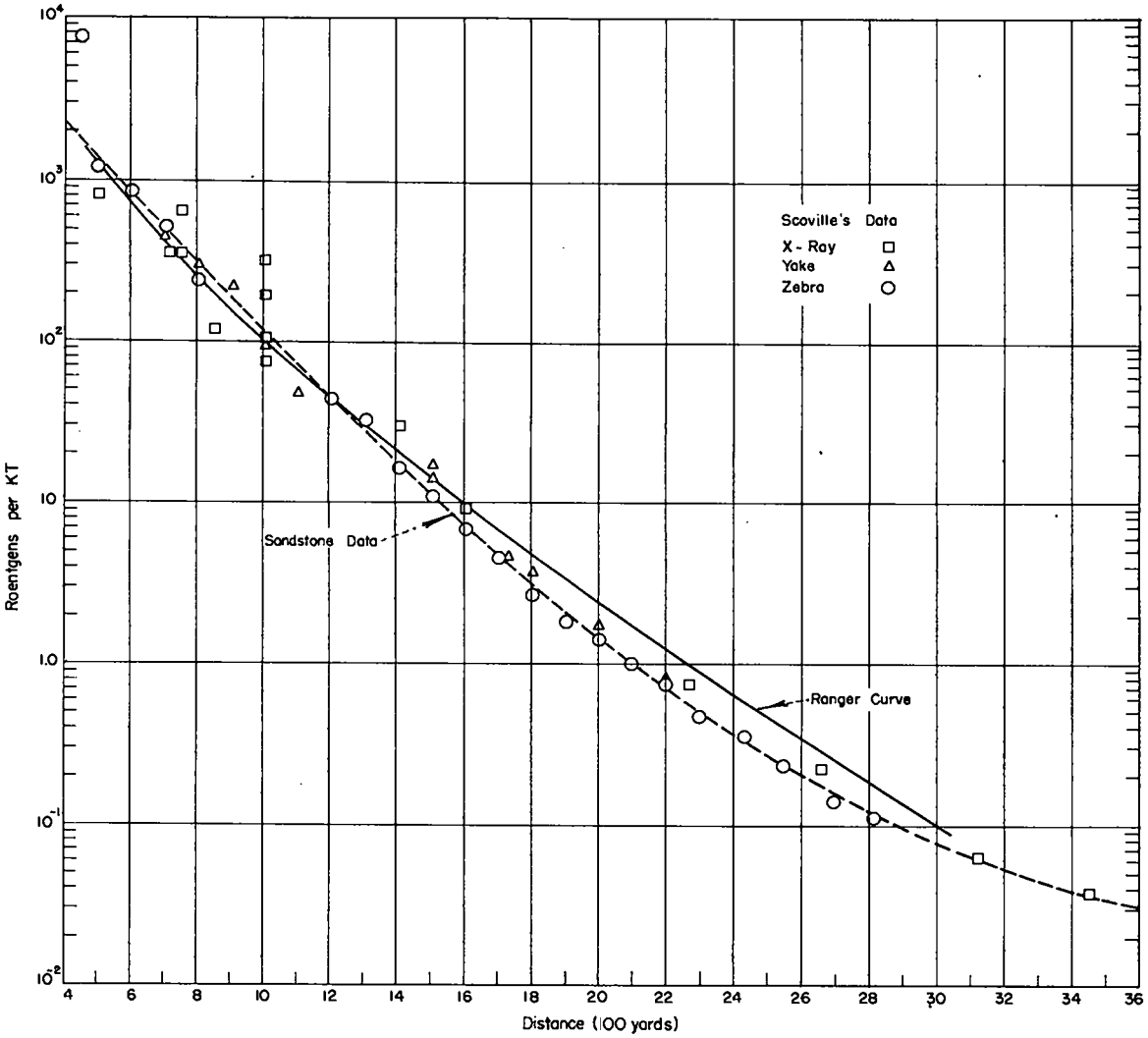

Figure 14
Gamma Radiation vs. Distance (Ranger and Sandstone)

[redacted]